Pertussis Data Snapshot

Routine immunization has greatly reduced morbidity and mortality attributed to pertussis, but periodic epidemics still occur in the U.S. every 3 to 4 years. Most recently, U.S. rates of pertussis increased significantly in 2004 and 2005 to nearly 8 per 100,000 population, but are beginning to return to pre-2004 levels of between 2 and 3 per 100,000 population. Like the U.S., Idaho experiences periodic epidemics, as illustrated in Figure 2. In 1988 and 1997, pertussis outbreaks occurred in Idaho and annual incidence rates were 2-3 times higher than the 20-year statewide average of 12.2 per 100,000 population. While Idaho rates have historically been higher than U.S. rates, in 2006 and 2007 statewide rates mirrored national rates. An adult vaccine has been available since 2005, and is recommended for healthcare workers with direct patient contact. Current child immunization schedules are available from the

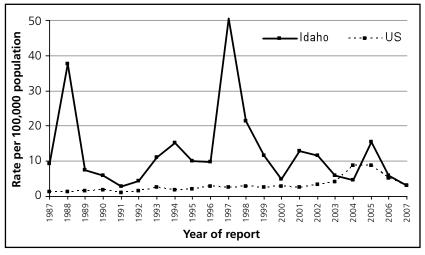


Figure: Pertussis incidence rates per 100,000 population, Idaho and U.S, 1987–2007*

*2007 and 2006 US data and 2007 Idaho data are preliminary.

Centers for Disease Control and Prevention at: http://www.cdc.gov/vaccines/recs/schedules/child-schedule.htm

An electronic version of the Rules and Regulations Governing Idaho Reportable Diseases may be found at http://adm.idaho.gov/adminrules/rules/idapa16/0210.pdf

Current and past issues are archived online at www.epi.idaho.gov.

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STDs and Adolescents

reliminary Idaho data show chlamydia rates continued to climb in 2007, showing an increase of 33% over the last five years. Gonorrhea rates rose 73% during the same time period.¹

Although 15-24 year olds make up only 25% of the U.S. population who are sexually active,2 over half of reported sexually transmitted disease (STD) is among persons in this age group. Young people aged 15-24 years old are at highest risk for acquiring STDs for a combination of behavioral, biological, and cultural reasons, but most teens do not consider themselves at risk due to stereotypical beliefs about who is "at risk." However, in the U.S., one in four sexually active girls aged 14-19 have at least one of the most common STDs (human papillomavirus [HPV], chlamydia, herpes simplex virus, and trichomoniasis).2 This is especially problematic, since STDs such as chlamydia and gonorrhea have the potential to cause infertility in these young women just entering their child-bearing years. In 2006, chlamydia rates in Idaho were highest among 20- to 24-year olds (1,302 cases per 100,000 population aged 20-24) followed by 15- to 19-year olds (903 cases per 100,000 population).⁴

To prevent reinfection and the transmission of STD, it is imperative to treat the partner(s) of diagnosed patients. Stigma of STDs is a barrier to notifying partners, so educating youth about the high incidence of STD in their age groups and their increased physiological susceptibility to chlamydia due to cervical ectopy may decrease their level of discomfort and promote partner notification. With each chlamydia recurrence, the risk of developing pelvic inflammatory disease (PID)

and its sequelae increases.⁶ Furthermore, antibiotic treatment may heighten susceptibility to transmission; therefore, individuals who reenter unchanged social networks may be at an increased risk of contracting chlamydia more than once.⁷ Based on empirical research, it is estimated 50–75% of teens will notify their primary partner; however, it is unlikely that other partner(s) will be notified unless education or provider referral is performed.^{5,6,7,8,9}

The higher incidence of STDs among adolescents and young adults reflects multiple barriers to utilizing quality STD prevention services including lack of insurance or other ability to pay, lack of transportation, discomfort with facilities and services designed for adults, and concerns about confidentiality.¹⁰ Expedited Partner Therapy (EPT), in which partners are treated without a medical exam, may reduce anxiety related to confidentiality and the discomfort of accessing sexual health care services. The Centers for Disease Prevention and Control (CDC) is promoting EPT based on results from six randomized clinical trials of over 6,000 patients. Results of these trials indicate the rate of persistent or recurrent chlamydia and gonorrhea infections were lower in patients managed with EPT than those managed with patient referral alone.11 Results of another randomized clinical trial showed patients who provided written materials for partner(s) had lower rates of reinfection than a control group using only patient referral,¹¹ Providers may not be legally protected against adverse reactions to therapy provided in EPT, but as of January 2007, the STD Control Branch of California had not received any reports of adverse

—continued on next page

STD AND ADOLESCENTS —continued from page 1

events related to EPT for chlamydia, in spite of the availability of a toll-free reporting line for such reports since 2001.¹²

The CDC and the US Preventive Services Task Force recommends screening all pregnant women and annually testing all sexually active 15- to 25-year old females for chlamydia.² In spite of this recommendation, screening coverage, especially among private providers, remains low. It is estimated that only 35% to 64% of these target population groups are tested each year.¹³

More information about EPT is available from the Idaho Department of Health and Welfare Family Planning, STD and HIV Programs. Contact Annabeth Elliott, RN, at (208) 334-6527.

REFERENCES:

- ¹ Preliminary data from the Office of Epidemiology and Food Protection
- ² Centers for Disease Control and Prevention. Press Release: National Representative CDC

- Study Finds 1 in 4 Teenage Girls Has a Sexually Transmitted Disease. Last Modified: April 7, 2008. Last Accessed April 15, 2008. http://www.cdc.gov/stdconference/2008/media/release-11-march2008.htm.
- ³ Campbell, C., & Deacon, H. (2006). Unravelling the contexts of stigma: from internalisation to resistance to change. Journal of Community & Applied Social Psychology, 16(6), 411-417.
- ⁴Idaho Office of Epidemiology and Food Protection. Idaho reported sexually transmitted disease, 2006. Accessed February 21, 2008 fro. http://www.healthandwelfare.idaho.gov/ portal/alias_Rainbow/lang_enS/tabID_3563/ DesktopDefault.aspx
- ⁵ Fortenberry, J. D., Brizendine, E. J., Katz, B. P. Orr, D. P. The role of self-efficacy and relationship quality in partner notification by adolescents with sexually transmitted infections. Arch Pediatr Adolesc Med. 2002;156(11):1133-1137.
- ⁶ Su H, Morrison R, Messer R, et al. The effects of doxycycline treatment on the development of protective immunity in a murine model of chlamydial genital infection. Journal of Infectious Disease. 1999;180:1252–1258.
- Brunham, R.C. Insights into the epidemiology of sexually transmitted diseases from Ro = cD. Sexually Transmitted Diseases. 2005;32(12):722–724.

- ⁸ Chacko M.R., Smith P.B., Kozinetz C.A. Understanding partner notification (patient selfreferral method) by young women. Journal of Pediatric and Adolescent Gynecology. 2000;13 (1):27-32.
- ⁹Lim , S., Coupey, S. Are adolescent girls with chlamydia infection notifying their partners? Journal of Pediatric and Adolescent Gynecology. 2005 February;18 (1):33–38.
- Ocenters for Disease Control and Prevention. STD surveillance 2006. Special focus profiles: Adolescents and young adults. Retrieved April 1, 2008 fro. http://www.cdc.gov/STD/STATS/adol.htm
- ¹¹ Trelle, S., Shang, A., Nartey, L., Cassell, J. A., Low, N. Improved effectiveness of partner notification for patients with sexually transmitted infections: Systematic review. BMJ, 2007;334(7589):354-361.
- ¹² California Department of Health. Patient-Delivered Partner Therapy for Chlamydia trachomatis and Neisseria gonorrhoeae: Guidance for Medical Providers in California. Retrieved April 4, 2008 fro. www.cdph.ca.gov/ HealthInfo/discond/Documents/Chlamydia-PDPT-Guidelines-Ptnr-Info.pdf
- ¹³ Low, N., Broutet, N., Adu-Sarkodie, Y., Barton, P., Hossain, M., Hawkes, S. (2006). Global control of sexually transmitted infections. Lancet. 2006;368(9551):2001-2016.

Current Haemophilus influenzae Type b Vaccination Recommendations

On December 13, 2007 Merck recalled multiple lots of the *Haemophilus influenzae* type b (Hib) vaccine which affected the supply of both the PEDVAXHIB® and COMVAX® vaccines nationwide. Merck recalled the vaccine because of potentially contaminated manufacturing equipment and could not guarantee the sterility of the vaccine. The shortage is ongoing, and may continue until 2009.

The interim Hib vaccination recommendations are:

- Defer administering the routine Hib vaccine booster administered at ages 12–15 months except for specified high-risk groups.
- Certain children at increased risk for Hib disease, including children with asplenia, sickle cell disease, human immunodeficiency virus infection, certain other immunodeficiency syndromes, and malignant neoplasms should continue to receive the full routinely recommended schedule including the 12–15 month booster dose.
- American Indian/Alaska Native (AI/AN) children should also continue to receive the full routinely recommended schedule including the 12–15 month
- booster dose. Providers who currently use PRP-OMP-containing Hib vaccines (PEDVAXHIB® and COMVAX®) to serve predominantly AI/AN children in AI/AN communities should continue to use only PRP-OMP-containing Hib vaccines.
- Vaccine For Children (VFC) Providers will need to order ActHIB on a monthly basis until there is enough supply to build an inventory. If a VFC provider does not receive an adequate Hib supply please contact the Idaho Immunization Program at (208) 334-5931 or 800-554-2922.

		INTERIM HIB SCHE	DULE	
Children On Schedule	2 Months	4 Months	6 Months	12 - 15 Months
Non High Risk	Pedvax Hib #1	Pedvax Hib #2	N/A	PedvaxHib Defer #3 Dose
Non High Risk	Pedvax Hib #1	ActHIB #2	ActHIB #3	ActHIB Defer Dose #4
Non High Risk	ActHIB #1	ActHIB #2	ActHIB #3	ActHIB Defer Dose #4
Non High Risk	2 doses of PedvaxHib completes the primary series of Hib defer the 3rd dose until adequate supply is available			
Non High Risk	3 doses of ActHIB complete the primary series of Hib defer the 4th dose until adequate supply is available			
		CHILDREN NOT ON S	CHEDULE	
Non High Risk	Administer age appropriate doses to complete the primary series			
High Risk	Administer age appropriate primary series and booster doses			
		HIGH RISK ON SCH	EDULE	
High Risk	Administer age appropriate primary series and booster doses			

CDC. Interim Recommendations for the Use of *Haemophilus influenzae* Type b (Hib) Conjugate Vaccines Related to the Recall of Certain Lots of Hib-Containing Vaccines (PedvaxHIB® and Comvax®). MMWR. 2007; 56 (50): 1318-1320. http://www.cdc.gov/mmwr/preview/mmwrhtml/mm5650a4.htm

2008 Changes to Idaho Reportable Diseases

On 4/2/2008 changes to the Rules and Regulations Governing Idaho Reportable Diseases (Rules), adopted during the 2008 legislative session, went into effect. The entire Rules chapter has been rewritten and reformatted to be more user-friendly for those required to report diseases.

Substantive changes relevant to healthcare providers include the following:

Invasive methicillin-resistant *Staphylococcus aureus* (MRSA) is now reportable by laboratories*. MRSA isolated from a normally sterile site must be reported within three days to public health (see MRSA article in this issue)

Respiratory syncytial virus (RSV) is now reportable by laboratories* within one day of identification.

Both "active pulmonary tuberculosis" and "cure of tuberculosis" for public health purposes have been defined. These definitions are as follows:

a. Active pulmonary tuberculosis—a disease of the lungs, determined by a physician to be poten-

tially contagious by clinical or bacteriological evidence, or by evidence of spread to others. Tuberculosis disease is considered active until cured.

b. Cure of tuberculosis—the completion of a course of antituberculosis treatment.

*For the purposes of the Rules, a laboratory is defined as any medical diagnostic laboratory inspected, licensed, or approved by the Idaho Department of Health and Welfare or licensed according to the provisions of the Clinical Laboratory Improvement Act by the United States Health Care and Financing Administration.

The current reportable disease list may be downloaded from http://www.epi.idaho.gov.

The complete Rules may be found at http://adm.idaho.gov/adminrules/rules/idapa16/0210.pdf

MRSA: a changing role for public health

In response to an increase in methicillin-resistant *Staphylococcus aureus* (MRSA) in community settings, outbreaks of MRSA in the United States in certain populations, and a recent JAMA article reporting more invasive MRSA than had previously been reported, changes to Idaho law were approved by the legislature this year.

In the past, although individual healthcare facilities in Idaho tracked MRSA rates, no statewide tracking was done. Local and state public health offices have assisted persons with questions about MRSA, and given advice to schools, long-term care facilities, and other institutions, but no restrictions for persons with MRSA infections have

been mandated in state law, other than for foodhandlers.

Under the new rules, invasive MRSA, defined as MRSA isolated from a normally sterile site, is now reportable to public health in Idaho by laboratories, but reporting by physicians or other healthcare providers is not required.

In addition, new restrictions apply for persons diagnosed with cutaneous MRSA infection. A person who is diagnosed with MRSA infection must not work in an occupation providing personal care to children, attend a day care facility, work in direct contact with students at a school, attend school, or provide personal care to persons in a healthcare facility, under the following circumstances:

- ➤ If the infection manifests as a lesion containing pus such as a boil or infected wound that is open or draining and the lesion is on the hands, wrists, or exposed portions of the arms, unless protected by an impermeable cover; or
- ➤ If the lesion is on another part of the body, unless covered by a dry, durable, tight-fitting bandage.

Such persons can return to work, daycare, or school once the lesion is covered.



